

Deemed Exports Tool for Researchers

OBJECTIVE:

NOAA needs to heighten awareness among its research community to ensure compliance with the Export Administration Regulations (EAR). Specifically, NOAA seeks to enhance the ability of researchers to determine whether technology developed, produced, or used during research is subject to the EAR.

BACKGROUND:

The Office of Inspector General (OIG) has recommended that NOAA "... review its research and NOAA-sponsored research to determine the applicability of deemed export controls." ("Deemed Export Controls May Not Stop the Transfer of Sensitive Technology to Foreign Nationals in the U.S.," IPE-16176 (March, 2004)).

The intent of the OIG's recommendation is to ensure that NOAA is correctly identifying research that may be subject to the EAR, by having researchers:

1. Determine **upfront** whether the input (e.g., technical data, technology acquired from the use of controlled equipment) is subject to the EAR;
2. Determine whether technology or information (hereinafter referred to as "technology") produced or developed **during** the research is subject to the EAR based on the intended destination of research results, by:
 - a) Determining whether there are restrictions (see below) affecting NOAA's decision and ability to disseminate research results; and
 - b) Determining whether the technology produced, developed, or used during research will be publicly disseminated.
3. Recognize that conducting "fundamental research" does not provide a *blanket* exemption to export controls for all technology involved in research projects.

Does the EAR affect whether NOAA can publish its research results?

The EAR does not regulate what can and cannot be published. As far as the EAR is concerned, the decision of whether or not to publish is up to the owner of the "technology." For Federal agencies, National Security Decision Directive (NSDD) Circular 189, "National Policy on the Transfer of Scientific, Technical, and Engineering Information (Sept. 21, 1985), states that: *"It is the policy of this Administration that, to the maximum extent possible, the products of fundamental research remain unrestricted."*

Why must researchers determine the intended destination of research results?

While the EAR does not determine whether a researcher can publish the "technology" developed, produced, or used during research, the decision to publish affects whether technology is subject to the EAR.

Other agreements may affect NOAA's decision and ability to disseminate research results. For example, NOAA is a signatory to some Cooperative and Research and Development Agreements (CRADA) that allow NOAA to enter into partnerships with private companies. CRADAs usually prohibit public dissemination of proprietary information or other technical information, as defined in the language for each CRADA. According to the Department of Commerce, "Annual Report

on Technology Transfer: Approach and Plans, FY 2004 Activities and Achievements FY2004,”¹ NOAA maintained nine active CRADAs. Research could be subject to the EAR if it is conducted under CRADAs and other arrangements with non-disclosure agreements that place restrictions on the public dissemination of research results.

Why do researchers need to recognize that fundamental research does not provide a blanket exemption to export controls for all technology involved in research projects?

Fundamental research is described on the Bureau of Industry and Security (BIS) website (www.bis.doc.gov) as

*“...basic and applied research in science and engineering where the **resulting information is ordinarily published** and shared broadly within the scientific community. It is distinguished from proprietary research and from industrial development, design, production, and product utilizations, the results of which ordinarily are restricted for proprietary and/or specific national security reasons. Normally, the results of “fundamental research” are published in scientific literature, thus making it publicly available. Research which is intended for publication, whether it is ever accepted by scientific journals or not, is considered to be “fundamental research.” ... Because any information, technological or otherwise, that is publicly available is not subject to the Export Administration Regulations (EAR) (except for encryption object code and source code in electronic form or media) and thus does not require a license, “fundamental research” is not subject to the EAR and does not require a license.”*

In 2003, several NOAA Line Offices (LO) initially advised the OIG that NOAA did not have controlled technology subject to the EAR, citing that NOAA conducts fundamental research. It was later reported that NOAA **may have incorrectly excluded technology** that is subject to the EAR. Subsequent assessments of NOAA technology at several NOAA research laboratories and science centers in 2005 indicated that NOAA may have some controlled items subject to the EAR at these locations. During the assessment, NOAA emphasized that conducting “fundamental research” does not provide a **blanket** exemption to export controls for all “technology” involved in research projects and that some NOAA research may not qualify as fundamental research. Thus, it is important to determine whether (1) the input (e.g., technical data, technology acquired from the use of controlled equipment) to the research is subject to the EAR; and (2) whether technology or information produced during the research is subject to the EAR based on the intended destination of research results.

The facilities involved in the 2005 assessment determined whether technology was publicly available or if the technology was proprietary or restricted for disclosure by other agreements. Technology that was not publicly available and that contained proprietary and restricted information was listed on the NOAA Controlled Technology inventory. NOAA then required the preparation of access control plans to ensure that controlled technology is not released to foreign nationals without a license from BIS.

What if an item is subject to the EAR?

NOAA must apply *appropriate* internal controls to ensure that technology subject to the EAR is not released to foreign nationals during research unless a license is in place.

¹ Report Accessed at <http://www.technology.gov/reports/TechTrans/FY2004.pdf> on February 23, 2006.

DEEMED EXPORT DECISION TOOL FOR RESEARCHERS:

To assist researchers in determining whether technology used as input to research, or technology developed or produced during research, is subject to EAR, we have identified below some scenarios that illustrate whether a technology transfer that occurs during research could be subject to the EAR. As stated above, it is important to consider the **input** into the research as well as the **intended destination (output)** of the research results to determine if the technology is subject to the EAR.

Input	Change that occurs during Research ²	Intended Destination of Research Results (Output)	Subject to the EAR
Publicly available (PA) technology	PA technology is improved upon (stronger, faster, better)	Public Dissemination	No. The technology that arises from the improvement of publicly available technology <i>and which is publicly disseminated is not subject to the EAR.</i>
		Resulting technology is not disseminated to the public. For example, NOAA may withhold the technology as proprietary information.	Yes. The technology that arises from the improvement of publicly available technology <i>and which is not publicly disseminated is subject to the EAR.</i>
Technology subject to the EAR	Technology subject to the EAR is used to develop better technology (stronger, faster, better). NOAA must apply appropriate internal controls to ensure that technology subject to the EAR is not released to foreign nationals during research unless a license is in place.	A researcher may be able to publicly disseminate information about new technology that arises during research, but the researcher cannot disseminate information on technology subject to the EAR.	No. The technology that arose during NOAA research is not subject to the EAR <i>if the results are publicly disseminated.</i>
		The results of this research are not publicly disseminated.	Yes. The technology subject to the EAR and the technology that arose during NOAA research are subject to the EAR.

² If, during the course of research, NOAA decides to withhold or not publish research results for proprietary or other reasons, BIS has asserted that export controls are not retroactively applied. However, export controls would be applied from the point that NOAA decides to withhold the information forward. NOAA would put in place access controls to ensure that export controlled technology is not released. Research which is intended for publication, whether it is ever accepted by scientific journals or not, is still considered to be "fundamental research" and not subject to the EAR.

DEEMED EXPORT COMPLIANCE WITH OIG RESEARCH RECOMMENDATION:

NOAA recently promulgated NAO 207-12 “Technology Controls and Foreign National Access,” setting forth policy regarding hosting foreign nationals as visitors or guests, and maintaining appropriate access controls on certain types of technology. Every NOAA executive, manager, and employee is responsible for compliance with this policy.

In addition, for research conducted or sponsored by NOAA, it is important that the primary researcher be responsible for the research review to ensure that the research is conducted in compliance with export control regulations and that the regulations are not violated during the course of research. NOAA researchers working with foreign nationals must have an understanding and awareness of what is subject to and controlled by the EAR so that they can conduct an *ongoing review, not just “prior to project start” or “prior to a decision to publish,”* of the work they are doing to determine whether it might require a license for foreign national access. While an upfront review is important; the researcher needs to understand **key aspects** of the EAR (e.g., the insertion of a non-disclosure agreement), so they can recognize, during any point of the research, when something becomes subject to the EAR.

To heighten the awareness among researchers receiving funds to conduct NOAA-sponsored research concerning their responsibilities to comply with export control regulations, NOAA has also developed standard contract and grant/cooperative agreement clauses for inclusion in applicable research and development awards.